	Application No.	Applicant(s)
Notice of Allowability	09/754,845	CARRO ET AL.
	Examiner	Art Unit
	Matthew B. Smithers	2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *an amendment filed on January 6, 2005*.

2. ☒ The allowed claim(s) is/are *12-21; renumbered as 1-10*.

3. ☒ The drawings filed on *04 January 2001* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Mr. Thomas Beck on April 13, 2005.

The application has been amended as follows:

<u>IN THE CLAIMS</u>:

12. (Original) A method of marking a text document [100] through the insertion of

inter-word blank characters, said method comprising the steps of:

editing [110] the number of said inter-word blank characters of said text

document in order to conform to a model to obtain a canonical text document [120]

retaining, from said canonical text document, to further conform to said model, a

subset of positions [230] of said inter-word blank characters, said subset of positions

permitting insertion of blank characters; computing, using said canonical text document

[120] and a secret-key as inputs [130], a unique combination of positions among said

subset of positions; inserting into each position [151] of said unique combination of

positions at least one extra blank character thus obtaining a marked text document

[150].

13. (Currently Amended) The method according to claim [[1]] 12 wherein said text

document [100] is said marked text document [150] to be authenticated by a recipient

sharing said secret key [130], said method further comprising the step of:

   comparing [160] said text document [100] to said marked text document

   if matching exactly [161]:

   accepting said received text document as authentic;

   if not [162] rejecting said received text document as fake.

14. (Previously Presented) A method of marking a text document through the insertion

of inter-word blank characters, said method comprising the steps of:

   editing the number of said inter-word blank characters of said text document in

order to conform to a model to obtain a canonical text document;

   wherein said model involves stripping all inter-word blank characters , in excess

of one, off said text document, said text document, said model further retaining all said

positions of said inter-word b blank characters in said subset of positions;

   retaining, from said canonical text document, to further conform to said model, a

subset of positions of said inter-word blank characters, said subset of positions

permitting insertion of blank characters;

   computing, using said canonical text document and a secret-key as inputs, a

unique combination of positions among said subset of positions; inserting into each

position of said unique combination of positions at least one extra blank character thus

obtaining a marked text document; wherein said text document is said marked text

document to be authenticated by a recipient sharing said secret-key, said method

further comprising the step of

comparing [160] said text document [100] to said marked text document;

if matching exactly [161] accepting said received text document as authentic:

if not [162] rejecting said received text document as fake.

15. (Previously Presented) The method according to Claim 14 wherein said model calls

for the insertion, into a soft-copy text document, of three blank characters at each

end-of-line.

16. (Previously Presented) The method according to Claim 15 wherein said model calls

for excluding end-of-line blank characters from said subset of positions.

17. (Previously Presented) The method according to Claim 16 wherein the number of

inserted blanks to mark a said text document is set to reach a probability equal to or

less than a predefined value of obtaining an identical said marked text document purely

by chance.

18. (Previously Presented) The method according to claim 14 wherein the step of

computing a unique combination of positions further includes the steps of:

calculating a digest uniquely representing said secret-key combined with said

canonical text deriving from said digest a plurality of randomly distributed numbers

fitting in said subset of positions.

19. (Previously Presented) The method according to claim 18 wherein the step of

calculating a digest is replaced by the step of applying a hashing function over said

secret-key concatenated with said canonical text thus obtaining a fixed-size keyed digest.

20. (Previously Presented) The method according to claim 19 wherein the step of deriving a plurality of randomly distributed numbers further includes the steps of: indexing said subset of positions using said digest as a seed of a PRN (pseudo-random-number) generator, operating said PRN generator; said step of operating said PRN generator further including the steps of retaining those of said numbers that fit said indexing; excluding duplicated said numbers; continuing to operate said PRN generator till enough valid numbers are withdrawn to match the number of blanks to be inserted.

21. (Previously Presented) An authentication system, suitable for authenticating a text document, comprising means adapted for carrying out the method defined in Claim 14.

22. (Canceled)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew T. Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Matthew B Smithers
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Art Unit 2137